1.   (Amended) A currency evaluating device for receiving a stack of currency bills, rapidly discriminating the bills in the stack, and then re-stacking the bills comprising:

an input receptacle <u>adapted to receive</u> [for receiving] said stack of currency bills to be discriminated;

a transport mechanism <u>adapted to transport</u> [for transporting] said bills in the direction of the narrow dimension of the bills, one at a time, from said input receptacle to a plurality of output receptacles, at a rate in excess of about 800 bills per minute; and

a discriminating unit <u>adapted to determine</u> [for determining] the denomination of each of said bills <u>at a rate in excess of about 800 bills per minute</u>, said discriminating unit including a detector positioned along a transport mechanism path between said input receptacle and one of said [a] plurality of output receptacles <u>adapted to receive and re-stack</u> [for receiving and re-stacking] said bills after being discriminated by said discriminating unit.

2.   (Amended) The currency device of claim 1 further comprising an authenticating unit <u>adapted to determine</u> [for determining] the genuineness of said bills.

4.   (Amended) The currency device of claim 1 further comprising a counting device <u>adapted to</u> [for] rapidly <u>count</u> [counting] said bills in said stack, said counting device comprising one or more counters keeping track of the value of bills discriminated.

6.   (Amended) The currency authenticating device of claim 5 wherein <u>the</u> plurality of magnetoresistive sensors are arranged in an array.

7.   (Amended) The currency device of claim 6 wherein <u>the</u> plurality of magnetoresistive sensors are arranged in a linear array.

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23.   (Amended) A currency evaluating device for receiving a stack of currency bills, rapidly discriminating the bills in the stack, and then re-stacking the bills comprising:

an input receptacle <u>adapted to receive</u> [for receiving] said stack of currency bills to be discriminated;

a transport mechanism <u>adapted to transport</u> [for transporting] said bills in the direction of the narrow dimension of the bills, one at a time, from said input receptacle to a plurality of output receptacles, at a rate in excess of about 800 bills per minute; and

a discriminating unit <u>adapted to determine</u> [for determining] the denomination of each of said bills <u>at a rate in excess of about 800 bills per minute</u>, said discriminating unit including a detector positioned along a transport mechanism path between said input receptacle and one of said [a] plurality of output receptacles <u>adapted to receive and re-stack</u> [for receiving and re-stacking] said bills after being discriminated by said discriminating unit,

wherein said currency evaluating device has a height not exceeding about 17 ½

STET   inches, a width not exceeding about 13 ½ inch and a depth not exceeding about 15 inches.

Please add new Claims 24-52 as follows.

--24.   A currency evaluating device adapted to receive a stack of currency bills, rapidly discriminating the bills in the stack, and then re-stacking the bills comprising:

an input receptacle adapted to receive the stack of currency bills to be discriminated;

a transport mechanism adapted to transport the bills in the direction of the narrow dimension of the bills, one at a time, from the input receptacle to a plurality of output receptacles, at a rate in excess of about 800 bills per minute; and

a discriminating unit adapted to determine the denomination of each of the bills at a rate in excess of about 800 bills per minute, the discriminating unit including a detector positioned along a transport mechanism path between the input receptacle and one of the plurality of output receptacles adapted to receive and re-stack the bills after being discriminated by the discriminating unit,

wherein the currency evaluating device has a volume not exceeding 2.05 ft^3.

25.   The currency device of claim 24 wherein the transport mechanism transports bills at a rate in excess of about 1000 bills per minute and the discriminating unit determines the denomination of each of the bills at a rate in excess of about 1000 bills per minute.

26.   The currency device of claim 1 wherein the transport mechanism is adapted to transport at a rate in excess of about 1000 bills per minute and the discriminating unit is adapted to determine the denomination of each of the bills at a rate in excess of about 1000 bills per minute.

27.   The currency device of claim 23 wherein the transport mechanism is adapted to transport at a rate in excess of about 1000 bills per minute and the discriminating unit is adapted to determine the denomination of each of the bills at a rate in excess of about 1000 bills per minute.

28.   A currency evaluating device adapted to receive a stack of currency bills, rapidly discriminating the bills in the stack, and then re-stacking the bills comprising:

an input receptacle adapted to receive the stack of currency bills to be discriminated;

a transport mechanism adapted to transport the bills in the direction of the narrow dimension of the bills, one at a time, from the input receptacle to a plurality of output receptacles, at a rate in excess of about 800 bills per minute;

a discriminating unit adapted to determine the denomination of each of the bills at a rate in excess of about 800 bills per minute, the discriminating unit including a detector positioned along a transport mechanism path between the input receptacle and one of the plurality of output receptacles adapted to receive and re-stack the bills after being discriminated by the discriminating unit; and

an authenticating unit adapted to determine the genuineness of the bills, the authenticating unit having an ultraviolet light source adapted to illuminate the bill to be tested, an ultraviolet light detector adapted to generate an output signal responsive to ultraviolet light reflected by the bill, and a processor programmed to receive the ultraviolet detector output signal and to determine the genuineness of the bill based upon the output signal.

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29.   The currency device of claim 28 wherein the authenticating unit further comprises a visible light detector adapted to generate an output signal responsive to visible light emitted by the bill upon illumination of the bill by the ultraviolet light source and wherein the processor is further programmed to receive the visible light detector output signal and to determine the genuineness of the bill based upon the ultraviolet light detector output signal and the visible light detector output signal.

30.   A currency counting and evaluation device adapted to receive a stack of currency bills, rapidly counting and evaluating all the bills in the stack, and then re-stacking the bills, the device comprising:

an input receptacle adapted to receive a stack of currency bills;

a transport mechanism adapted to transport the bills at a rate in excess of about 800 bills per minute, in the direction of the narrow dimension of the bills, from the input receptacle to one of a plurality of output receptacles adapted to receive and re-stack the bills after being counted and evaluated;

a stationary optical scanning head located between the input receptacle and the plurality of output receptacles adapted to scan a preselected segment of a central portion of each bill transported by the transport mechanism at a rate in excess of about 800 bills per minute, the scanning head including at least one light source adapted to illuminate a strip of the preselected segment of a bill, and at least one detector adapted to receive light from the illuminated strip on the bill and produce an output signal representing variations in the intensity of the received light;

means for sampling the output signal at preselected intervals as a bill is moved across the scanning head in the direction of the narrow dimension of the bill, each of the output

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signal samples being proportional to the intensity of the light received from a different strip of the preselected segment of a bill;

a memory programmed to store characteristic signal samples produced by scanning the preselected segments of bills of different denominations with the scanning head and sampling the output signal at the preselected intervals, each of the stored signal samples being proportional to the intensity of the light received from a different strip of the preselected segment of a bill; and

a processor programmed to receive the signal samples and (1) determine the denomination of each scanned bill by comparing the stored signal samples with the output signal samples produced by the scanning of each bill with the scanning head, (2) count the number of scanned bills of each denomination, and (3) accumulate the cumulative value of the scanned bills of each denomination.

31.   The currency counting and evaluation device of claim 30 further comprising an authenticating unit adapted to determine the genuineness of the bill.

32.   The currency counting and evaluation device of claim 30 wherein the preselected segment of each bill is located in the central region of the bill.

33.   The currency counting and evaluation device of claim 30 wherein the processor is responsive to the output signals from the detector and is adapted to determine the denomination of each scanned bill before that bill has been advanced to the plurality of output receptacles, and further comprising means responsive to the processor for altering the movement of a scanned bill in response to the denomination determination for that bill, before that bill is advanced to the plurality of output receptacles.

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34. The currency counting and evaluation device of claim 30 wherein the transport mechanism transports bills, at a rate of at least about 1000 bills per minute.

35. A method of evaluating currency bills of different denominations using a currency evaluation device comprising:

receiving a stack of bills to be evaluated in an input receptacle of the evaluation device;

transporting, under control of the evaluation device at a rate in excess of about 800 bills per minute, the bills along a transport mechanism in the direction of the narrow dimension of the bills, one at a time, from the input receptacle to a plurality of output receptacles; and

determining the denomination of the bills under control of the evaluation device using a denomination discriminating unit at a rate in excess of about 800 bills per minute, the discriminating unit including a detector positioned along a transport mechanism path between the input receptacle and one of the plurality of output receptacles adapted to receive and re-stack the bills after being discriminated by the discriminating unit.

36. The method of claim 35 further including authenticating the denomination of the bills under control of the evaluation device using an authenticating unit adapted to determine the genuineness of the bills.

37. The method of claim 36 wherein the authenticating unit includes a plurality of magnetoresistive sensors.

38. The method of claim 37 wherein the plurality of magnetoresistive sensors are arranged in an array.

39. The method of claim 38 wherein the plurality of magnetoresistive sensors are arranged in a linear array.

40. The method of claim 35 wherein the plurality of output receptacles is exactly six output receptacles.

41. The method of claim 35 further including counting the bills under control of the evaluation device, the counting device comprising one or more counters keeping track of the value of bills discriminated.

42. The method of claim 35 wherein the evaluating device has a height not exceeding about 17 ½ inches, a width not exceeding about 13 ½ inch and a depth not exceeding about 15 inches.

43. The method of claim 35 wherein the currency evaluating device has a volume not exceeding 2.05 ft^3.

44. The method of claim 35 wherein transporting and determining the denomination of bills is performed at a rate of at least 1000 bills per minute.

45. A method of evaluating currency bills of different denominations using a currency evaluation device comprising:

receiving a stack of bills to be evaluated in an input receptacle of the evaluation device;

transporting, under control of the evaluation device, the bills along a transport mechanism in the direction of the narrow dimension of the bills, one at a time, from the input receptacle to a plurality of output receptacles, at a rate in excess of about 800 bills per minute;

determining the denomination of the bills under control of the evaluation device using a denomination discriminating unit at a rate in excess of about 800 bills per minute, the discriminating unit including a detector positioned along a transport mechanism path between the

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input receptacle and one of the plurality of output receptacles adapted to receive and re-stack the bills after being discriminated by the discriminating unit; and

authenticating the bills under control of the evaluation device using an authenticating unit adapted to determine the genuineness of the bills, the authenticating unit having an ultraviolet light source adapted to illuminate the bill to be tested, an ultraviolet light detector adapted to generate an output signal responsive to ultraviolet light reflected by the bill, and a processor programmed to receive the ultraviolet detector output signal and to determine the genuineness of the bill based upon the output signal.

46.   The method of claim 45 wherein the authenticating unit further comprises a visible light detector adapted to generate an output signal responsive to visible light emitted by the bill upon illumination of the bill by the ultraviolet light source and wherein the processor is further programmed to receive the visible light detector output signal and to determine the genuineness of the bill based upon the ultraviolet light detector output signal and the visible light detector output signal.

47.   A method of evaluating currency bills of different denominations using a currency evaluation device comprising:

receiving a stack of bills to be evaluated in an input receptacle of the evaluation device;

transporting, under control of the evaluation device, the bills along a transport mechanism in the direction of the narrow dimension of the bills, one at a time, from the input receptacle to a plurality of output receptacles, at a rate in excess of about 800 bills per minute;

scanning a preselected segment of a central portion of each bill transported by the transport mechanism at a rate in excess of about 800 bills per minute by a stationary optical scanning head located between the input receptacle and the plurality of output receptacles, the scanning head including at least one light source adapted to illuminate a strip of the preselected segment of a bill, and at least one detector adapted to receive light from the illuminated strip on the bill and produce an output signal representing variations in the intensity of the received light;

sampling the output signal at preselected intervals as a bill is moved across the scanning head in the direction of the narrow dimension of the bill, each of the output signal samples being proportional to the intensity of the light received from a different strip of the preselected segment of a bill; and

feeding the output signal samples to a processor, the processor (1) determining the denomination of each scanned bill by comparing stored signal samples with the output signal samples produced by the scanning of each bill with the scanning head, (2) counting the number of scanned bills of each denomination, and (3) accumulating the cumulative value of the scanned bills of each denomination.

48. The method of claim 47 further comprising authenticating the bills under control of the evaluation device using an authenticating unit adapted to determine the genuineness of the bill.

49. The method of claim 47 wherein the preselected segment of each bill is located in the central region of the bill.

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